## Research Summary



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## **Risk Communication for Offenders**

**Question:** How should we report the recidivism risk of offenders?

Background: Many decisions within the criminal justice system are informed by evaluations of the offender's risk for reoffending. Although there have been considerable advances in the methods used to assess risk, there has been little change in how risk is communicated. Typically, risk is reported in nominal categories of "low", "moderate", or "high". Even though decision-makers like using these terms, there is little agreement as to what they mean. Different evaluators use "low risk" and "high risk" to mean different things. Different decision-makers infer different conclusions from the same report. Consequently, there is a need for more precise methods of risk communication.

Method: A literature review on risk communication was conducted. This review examined the practices and preferences of both evaluators and decision-makers, and the strengths and weaknesses of the various approaches. In addition to studies involving correctional and forensic settings, the review also considered risk communications concerning health, safety, and environmental hazards.

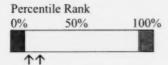
Answer: Problems with risk communication are not restricted to forensic or criminal justice settings. In all settings, statements

concerning the probability of a negative event are interpreted differently based on how the information is presented. Different conclusions, for example, are inferred from probabilities (.20) than frequencies (2 out of 10). Risk is even considered to vary based on the size of the denominator. For example, most people consider a risk of 1,286 out of 10,000 to be worse than a risk of 24.14 out of 100, even though the latter is actually twice as risky. Such misunderstandings can be explained by the mental short-cuts we commonly use to make sense of numbers.

The most accurate risk communications were those that expressed risk in several different ways. For example, nominal categories can be supplemented with numeric descriptors and graphs. Examples of numeric descriptors of risk include probabilities (46% chance of violent recidivism after 5 years), percentiles (top 19% of offenders) and risk ratios (2.3 times more likely than the typical offender).

Below is an example of a risk communication of a Mr. X based on his score on Static-99 – a risk tool commonly used with sexual offenders. Mr. X – a school teacher convicted of inappropriate sexual touching of a 16-year-old student – has a score of 1 on the Static-99 (the lowest possible score is zero and the average score is 2). Compared to other Canadian sexual offenders, Mr. Smith places in the 12.4th to

31.0st percentile. In other words, 12.4% to 31.0% of sex offenders in Canada scored lower or equal to Mr. X on the Static-99 and 69.0% to 87.6% scored higher.



Mr. X belongs to a group of sex offenders who, if followed for 5 years after release, would reoffend sexually at a rate of between 3.2% and 10.3%. In other words, out of 100 sex offenders similar to Mr. X, between 3 and 10 would reoffend after 5 years. The expected sexual recidivism rate after 10 years would be between 2.6% and 15.8%. In other words, out of 100 sex offenders similar to Mr. X, between 3 and 16 would reoffend sexually after 10 years.

Mr. X's recidivism rate would be expected to be approximately 2/3 the recidivism rate of the typical sex offender (risk ratio of 1).

Relative Risk Ratio
0 .5 1 2 5

Ratings in the red range indicate risk that is higher than average and ratings in the green range indicate risk that is lower than average. The fictitious Mr. X scores in the low end of the average (yellow) range for sexual offenders.

The ranges are selected for illustrative purposes only, and different cut-points may be better suited for different types of evaluations.

## **Policy Implications:**

- Evaluators and decision-makers need to carefully consider their methods of risk communication to limit the opportunities for misunderstanding.
- Terms such as "low", "moderate" and "high" risk need to be linked to explicit definitions. These definitions should include numeric indicators (e.g., percentiles, probabilities) and be consistent with the recommendations implied by the risk categorization.
- Risk communications should be expressed in several different formats. These formats could include verbal descriptions, numeric estimates, and graphs.

Source: Babchishin, K. M, & Hanson, R. K (2009). Improving our talk: Moving beyond the "low", "moderate", and "high" typology of risk communication. *Crime Scene*, 16, 11-14. Available at http://www.cpa.ca/sections/criminaljustice/publi

cations/

## For further information:

R. Karl Hanson, Ph.D.
Corrections Research
Public Safety Canada
340 Laurier Avenue West
Ottawa, Ontario K1A 0P8
Phone: 613-991-2840 Fax: 613-990-8295
E-mail: Karl.Hanson@ps.gc.ca

Also available on Public Safety Canada's website at: www.PublicSafety.gc.ca



